of the Flora of Hercynia; by E. Hampe. - Vegetation of the Brocken ; by E. Hampe.-On the genus Grubbia, Endl.; by Klotzsch.-On Monstrosities of Plants; by Schlechtendal.-Prodromus of a monograph of Lemnacee ; by Dr. Schleiden.-On two remarkable transformations of Plants; by Weinmann.-Request to German botanists to supply desiderata in the genus Artemisia; by W. D. Besser.-On Mexican Plants collected by Schiede and others; by D. F. L. De Schlechten.-On the irregular form of Papilionaceous Flowers; by A. Walpers.

## Part V.

Critical Remarks on Cape Leguminosa; by G. W. Walpers.-On some phænomena in the growth of Dicotyledonous Plants; by Dr. Becks.-On Mexican Galphimia ; by F. T. Bartling.-On Pinus Pumilio ; by H. R. Göppert.

## Part VI.

On the family of Piperacea; by C. Kunth.

## PROCEEDINGS OF LEARNED SOCIETIES.

## botanical society of london.

March 20.-Daniel Cooper, Esq., Curator, in the Chair.
A paper was read by Dr. W. H. Willshire, "On the nature of some of the lowest Organized Beings." The intention of the paper was to bring before the Society the views lately advanced by Ehrenberg, in his great work concerning the organization and relative place in the scale of animated nature of many of the tribe Bacillaria, Closterina, \&c. It was endeavoured to be proved that a great many members of the family Bacillaria, the genus Closterina, and several others, must be considered as of a vegetable nature, and not of an animal, as Ehrenberg supposes, and that it is a matter of some doubt how far the members ranking under his sub-division Naviculacea may be considered as of an animal organization either. It was shown by Dr. Willshire that the phænomenon of self-division is not peculiar to the animal kingdom, but that it likewise occurs in that of the vegetable ; that the whorled ramuli of Chara can increase both by transverse and longitudinal self-division ; that the formation of spores in Marchantia, Jungermannia, and some other plants, takes place from self-division of the original cellule; and that the increase of Conferva glomerata, \&c. is also known to ensue by the same means; and that therefore the mere fact of this mode of propagation in such structures as Diatoma, Fragillaria, Desmidium and others, is not a sufficient proof of their animal condition. It was stated likewise that granular matter, seen within many of these lower beings, and which is regarded by Ehrenberg in many cases as the ova granules or eggs of these creatures, cannot be such ; for according to other observers, they become blue on the addition of the tincture of iodine, a further proof of their vegetable nature, and a fact particularly noticed by
of the Flora of Hercynia; by E. Hampe. - Vegetation of the Brocken ; by E. Hampe.-On the genus Grubbia, Endl.; by Klotzsch.-On Monstrosities of Plants; by Schlechtendal.-Prodromus of a monograph of Lemnacee ; by Dr. Schleiden.-On two remarkable transformations of Plants; by Weinmann.-Request to German botanists to supply desiderata in the genus Artemisia; by W. D. Besser.-On Mexican Plants collected by Schiede and others; by D. F. L. De Schlechten.-On the irregular form of Papilionaceous Flowers; by A. Walpers.

## Part V.

Critical Remarks on Cape Leguminosa; by G. W. Walpers.-On some phænomena in the growth of Dicotyledonous Plants; by Dr. Becks.-On Mexican Galphimia ; by F. T. Bartling.-On Pinus Pumilio ; by H. R. Göppert.

## Part VI.

On the family of Piperacea; by C. Kunth.

## PROCEEDINGS OF LEARNED SOCIETIES.

## botanical society of london.

March 20.-Daniel Cooper, Esq., Curator, in the Chair.
A paper was read by Dr. W. H. Willshire, "On the nature of some of the lowest Organized Beings." The intention of the paper was to bring before the Society the views lately advanced by Ehrenberg, in his great work concerning the organization and relative place in the scale of animated nature of many of the tribe Bacillaria, Closterina, \&c. It was endeavoured to be proved that a great many members of the family Bacillaria, the genus Closterina, and several others, must be considered as of a vegetable nature, and not of an animal, as Ehrenberg supposes, and that it is a matter of some doubt how far the members ranking under his sub-division Naviculacea may be considered as of an animal organization either. It was shown by Dr. Willshire that the phænomenon of self-division is not peculiar to the animal kingdom, but that it likewise occurs in that of the vegetable ; that the whorled ramuli of Chara can increase both by transverse and longitudinal self-division ; that the formation of spores in Marchantia, Jungermannia, and some other plants, takes place from self-division of the original cellule; and that the increase of Conferva glomerata, \&c. is also known to ensue by the same means; and that therefore the mere fact of this mode of propagation in such structures as Diatoma, Fragillaria, Desmidium and others, is not a sufficient proof of their animal condition. It was stated likewise that granular matter, seen within many of these lower beings, and which is regarded by Ehrenberg in many cases as the ova granules or eggs of these creatures, cannot be such ; for according to other observers, they become blue on the addition of the tincture of iodine, a further proof of their vegetable nature, and a fact particularly noticed by
of the Flora of Hercynia; by E. Hampe. - Vegetation of the Brocken ; by E. Hampe.-On the genus Grubbia, Endl.; by Klotzsch.-On Monstrosities of Plants; by Schlechtendal.-Prodromus of a monograph of Lemnacee ; by Dr. Schleiden.-On two remarkable transformations of Plants; by Weinmann.-Request to German botanists to supply desiderata in the genus Artemisia; by W. D. Besser.-On Mexican Plants collected by Schiede and others; by D. F. L. De Schlechten.-On the irregular form of Papilionaceous Flowers; by A. Walpers.

## Part V.

Critical Remarks on Cape Leguminosa; by G. W. Walpers.-On some phænomena in the growth of Dicotyledonous Plants; by Dr. Becks.-On Mexican Galphimia ; by F. T. Bartling.-On Pinus Pumilio ; by H. R. Göppert.

## Part VI.

On the family of Piperacea; by C. Kunth.

## PROCEEDINGS OF LEARNED SOCIETIES.

## botanical society of london.

March 20.-Daniel Cooper, Esq., Curator, in the Chair.
A paper was read by Dr. W. H. Willshire, "On the nature of some of the lowest Organized Beings." The intention of the paper was to bring before the Society the views lately advanced by Ehrenberg, in his great work concerning the organization and relative place in the scale of animated nature of many of the tribe Bacillaria, Closterina, \&c. It was endeavoured to be proved that a great many members of the family Bacillaria, the genus Closterina, and several others, must be considered as of a vegetable nature, and not of an animal, as Ehrenberg supposes, and that it is a matter of some doubt how far the members ranking under his sub-division Naviculacea may be considered as of an animal organization either. It was shown by Dr. Willshire that the phænomenon of self-division is not peculiar to the animal kingdom, but that it likewise occurs in that of the vegetable ; that the whorled ramuli of Chara can increase both by transverse and longitudinal self-division ; that the formation of spores in Marchantia, Jungermannia, and some other plants, takes place from self-division of the original cellule; and that the increase of Conferva glomerata, \&c. is also known to ensue by the same means; and that therefore the mere fact of this mode of propagation in such structures as Diatoma, Fragillaria, Desmidium and others, is not a sufficient proof of their animal condition. It was stated likewise that granular matter, seen within many of these lower beings, and which is regarded by Ehrenberg in many cases as the ova granules or eggs of these creatures, cannot be such ; for according to other observers, they become blue on the addition of the tincture of iodine, a further proof of their vegetable nature, and a fact particularly noticed by


## DESCRIPTION.

A.. PrincipalEntrance from the Bridye.
B.. Hinter Bhtranne fichester Terrnce, ilfoseum, Zitionary \&c.
C.. Walk coverid with Glafs.
D. ConservatoryorWinter Garden upon raised Tervaces.
E. Agricuiturnl. Department..
F. Geographical armanyement.
C. Plants used in the Arts Namufactures \&c.
H. Jussicuan Arrangernent..
I. Merlical Garden.
K. Iinnean Arrangement.
L. Experimental Garden
M. Engine House \& Well to feed. N...
N. the Reservoir for mhe supply of the Gardens.
O. Curators House.
P. Reservoir belonging the Crown

Q British Plantis \& Rochwork.
R. Nursery......
S.S.S. Tards for Sheds Stables do.
T.T. Inderground Pafsages...
T.T.Mounds for Shelter \& Variety.
V.V.Seats.
W. Water.


## DESCRIPTION.

A.. PrincipalEntrance from the Bridye.
B.. Hinter Bhtranne fichester Terrnce, ilfoseum, Zitionary \&c.
C.. Walk coverid with Glafs.
D. ConservatoryorWinter Garden upon raised Tervaces.
E. Agricuiturnl. Department..
F. Geographical armanyement.
C. Plants used in the Arts Namufactures \&c.
H. Jussicuan Arrangernent..
I. Merlical Garden.
K. Iinnean Arrangement.
L. Experimental Garden
M. Engine House \& Well to feed. N...
N. the Reservoir for mhe supply of the Gardens.
O. Curators House.
P. Reservoir belonging the Crown

Q British Plantis \& Rochwork.
R. Nursery......
S.S.S. Tards for Sheds Stables do.
T.T. Inderground Pafsages...
T.T.Mounds for Shelter \& Variety.
V.V.Seats.
W. Water.


## DESCRIPTION.

A.. PrincipalEntrance from the Bridye.
B.. Hinter Bhtranne fichester Terrnce, ilfoseum, Zitionary \&c.
C.. Walk coverid with Glafs.
D. ConservatoryorWinter Garden upon raised Tervaces.
E. Agricuiturnl. Department..
F. Geographical armanyement.
C. Plants used in the Arts Namufactures \&c.
H. Jussicuan Arrangernent..
I. Merlical Garden.
K. Iinnean Arrangement.
L. Experimental Garden
M. Engine House \& Well to feed. N...
N. the Reservoir for mhe supply of the Gardens.
O. Curators House.
P. Reservoir belonging the Crown

Q British Plantis \& Rochwork.
R. Nursery......
S.S.S. Tards for Sheds Stables do.
T.T. Inderground Pafsages...
T.T.Mounds for Shelter \& Variety.
V.V.Seats.
W. Water.

Meyen in respect to Euastrum and Closterium ; that the mere dissolution from some of these lower beings of moving sporules, or at least mobile portions capable of increase of form and size, is not a proof of the animal condition of the parent bearing them, because from the observations of Vaucher, Lamoureux, Montaigne, and especially the younger Agardh, we may safely conclude that the sporules of a very great many Alga, when ripe, are endowed with the faculty of locomotion; and that this not only takes place when such portions become freed from the mother plant, but in some cases also whilst they are within the interior of the cellules; also, that the fact of locomotion is not a proof at this low extremity of the scale of animal conditions, as we know that it takes place in structures allowed by Ehrenberg himself to be of vegetable nature, such as the Oscillatorias and Zygnemas ; and that Ehrenberg's opinion, that the motion seen taking place in Oscillatoria is caused by rapid growth of the filaments, formation of gemmæ, and stimulus of light, is ably and sufficiently disproved by the experiments of Capt. Carmichael; and also, that as we cannot in the present state of our knowledge say that the attainment of a particular result from the occurrence of motion, as more apparently ensues in the Naviculas than in the Oscillatorias, is indicative of animal conditions, because result or purpose attained is equally observable in the movements of Zygnema or even in Vallisneria, and the motions of many irritable stamens; it seems to be highly probable, that many of these almost invisible organisms hitherto freely yielded up by the botanist to the zoologist, must not be considered as indisputable claims for such distinction, although they may not appear at once so decidedly vegetable as do Diatoma, Fragillaria, Desmidium, Closterium and others.

The paper was concluded with some remarks on the genus Navicula, and illustrated with specimens under the microscope of the various genera, together with a series of diagrams.
April 3.-J. E. Gray, Esq., F.R.S., \&c., President, in the Chair.
The Secretary announced a donation of a very extensive collection of Foreign Plants, presented by Mr. Emerson through Mr. John Morris. A paper was read from Mr. Riley of Papplewick, Notts, being introductory to a series, which will form a popular "Monograph on Ferns."

June 5th.-D. C. Macreight, M.D., V.P., in the Chair.
A donation of American Plants from Dr. Gavin Watson of Philadelphia, U. S. was announced. Mr. Tatham, of Settle, Yorkshire, presented specimens of Dryas Octopetala obtained from the hills in that neighbourhood. Mr. H. M. Holman, of Reigate, Surrey, forwarded living specimens for distribution of the rarer plants of that locality, comprising Aceras anthropophora, Ophrys muscifera, Osmunda regalis, \&c. \&c. A paper was read, being Part 3. of a Monograph of Ferns. It comprised a description of the British species individually; the remarks being the result of many years personal experience, the author having cultivated every British species side

Meyen in respect to Euastrum and Closterium ; that the mere dissolution from some of these lower beings of moving sporules, or at least mobile portions capable of increase of form and size, is not a proof of the animal condition of the parent bearing them, because from the observations of Vaucher, Lamoureux, Montaigne, and especially the younger Agardh, we may safely conclude that the sporules of a very great many Alga, when ripe, are endowed with the faculty of locomotion; and that this not only takes place when such portions become freed from the mother plant, but in some cases also whilst they are within the interior of the cellules; also, that the fact of locomotion is not a proof at this low extremity of the scale of animal conditions, as we know that it takes place in structures allowed by Ehrenberg himself to be of vegetable nature, such as the Oscillatorias and Zygnemas ; and that Ehrenberg's opinion, that the motion seen taking place in Oscillatoria is caused by rapid growth of the filaments, formation of gemmæ, and stimulus of light, is ably and sufficiently disproved by the experiments of Capt. Carmichael; and also, that as we cannot in the present state of our knowledge say that the attainment of a particular result from the occurrence of motion, as more apparently ensues in the Naviculas than in the Oscillatorias, is indicative of animal conditions, because result or purpose attained is equally observable in the movements of Zygnema or even in Vallisneria, and the motions of many irritable stamens; it seems to be highly probable, that many of these almost invisible organisms hitherto freely yielded up by the botanist to the zoologist, must not be considered as indisputable claims for such distinction, although they may not appear at once so decidedly vegetable as do Diatoma, Fragillaria, Desmidium, Closterium and others.

The paper was concluded with some remarks on the genus Navicula, and illustrated with specimens under the microscope of the various genera, together with a series of diagrams.
April 3.-J. E. Gray, Esq., F.R.S., \&c., President, in the Chair.
The Secretary announced a donation of a very extensive collection of Foreign Plants, presented by Mr. Emerson through Mr. John Morris. A paper was read from Mr. Riley of Papplewick, Notts, being introductory to a series, which will form a popular "Monograph on Ferns."

June 5th.-D. C. Macreight, M.D., V.P., in the Chair.
A donation of American Plants from Dr. Gavin Watson of Philadelphia, U. S. was announced. Mr. Tatham, of Settle, Yorkshire, presented specimens of Dryas Octopetala obtained from the hills in that neighbourhood. Mr. H. M. Holman, of Reigate, Surrey, forwarded living specimens for distribution of the rarer plants of that locality, comprising Aceras anthropophora, Ophrys muscifera, Osmunda regalis, \&c. \&c. A paper was read, being Part 3. of a Monograph of Ferns. It comprised a description of the British species individually; the remarks being the result of many years personal experience, the author having cultivated every British species side

Meyen in respect to Euastrum and Closterium ; that the mere dissolution from some of these lower beings of moving sporules, or at least mobile portions capable of increase of form and size, is not a proof of the animal condition of the parent bearing them, because from the observations of Vaucher, Lamoureux, Montaigne, and especially the younger Agardh, we may safely conclude that the sporules of a very great many Alga, when ripe, are endowed with the faculty of locomotion; and that this not only takes place when such portions become freed from the mother plant, but in some cases also whilst they are within the interior of the cellules; also, that the fact of locomotion is not a proof at this low extremity of the scale of animal conditions, as we know that it takes place in structures allowed by Ehrenberg himself to be of vegetable nature, such as the Oscillatorias and Zygnemas ; and that Ehrenberg's opinion, that the motion seen taking place in Oscillatoria is caused by rapid growth of the filaments, formation of gemmæ, and stimulus of light, is ably and sufficiently disproved by the experiments of Capt. Carmichael; and also, that as we cannot in the present state of our knowledge say that the attainment of a particular result from the occurrence of motion, as more apparently ensues in the Naviculas than in the Oscillatorias, is indicative of animal conditions, because result or purpose attained is equally observable in the movements of Zygnema or even in Vallisneria, and the motions of many irritable stamens; it seems to be highly probable, that many of these almost invisible organisms hitherto freely yielded up by the botanist to the zoologist, must not be considered as indisputable claims for such distinction, although they may not appear at once so decidedly vegetable as do Diatoma, Fragillaria, Desmidium, Closterium and others.

The paper was concluded with some remarks on the genus Navicula, and illustrated with specimens under the microscope of the various genera, together with a series of diagrams.
April 3.-J. E. Gray, Esq., F.R.S., \&c., President, in the Chair.
The Secretary announced a donation of a very extensive collection of Foreign Plants, presented by Mr. Emerson through Mr. John Morris. A paper was read from Mr. Riley of Papplewick, Notts, being introductory to a series, which will form a popular "Monograph on Ferns."

June 5th.-D. C. Macreight, M.D., V.P., in the Chair.
A donation of American Plants from Dr. Gavin Watson of Philadelphia, U. S. was announced. Mr. Tatham, of Settle, Yorkshire, presented specimens of Dryas Octopetala obtained from the hills in that neighbourhood. Mr. H. M. Holman, of Reigate, Surrey, forwarded living specimens for distribution of the rarer plants of that locality, comprising Aceras anthropophora, Ophrys muscifera, Osmunda regalis, \&c. \&c. A paper was read, being Part 3. of a Monograph of Ferns. It comprised a description of the British species individually; the remarks being the result of many years personal experience, the author having cultivated every British species side
by side, and watched their specific differences with great care and attention. Mr. Thomas Sansom exhibited a proliferous specimen of Polytrichum commune, in which a second stem was developed in the place of the stalk bearing the fructification.

## ZOOLOGICAL SOCIETY.

Feb. 11, 1840.-The Rev. J. Barlow in the Chair.
Mr. G. T. Lay read the following account of the habits of a Bird of Paradise, Paradisea apoda, Linn.:-
"This bird has been in the possession of Mr. Beale upwards of fourteen years, and seemed when I left China at the commencement of the past year to be in full health and vigour. It is fed mainly upon boiled rice, with a few grasshoppers, as meat with its vegetables. These it eats whole when small, but pulls off the legs and wings when large. The tip of the abdomen, with the lower intestine, are rejected, while the rest of the viscera are devoured as a sort of choice morsel. It seizes the insect near its head with so firm a gripe, that life is soon extinct, which answers the double purpose of securing its prey and of shortening the dying throes of the poor victim. It is very careful to cleanse its bill after every such operation, wiping it upon the perch, and shaking it with a peculiar jerk. I have heard one remark that it is not a clean feeder, but this is true only of the mode of eating, which is gross and eager, as the largeness of the mouthful is incompatible with much grace or nicety in conveying the food to the place of its destination.
"The voice is loud and sonorous when he calls in a rapid succession of notes. This is probably the strain in which he answers his fellows in the wild state, and may be heard, from its clearness, a great distance, where walls and dwellings do not interfere with the pulsations. When you approach his cage he often treats you with a ditty, which I have called in my memorandum 'the song of solicitation.' It is short, but very pleasing, and not a little curious, for the notes are repeated in harmonic progression.
" The Serenade of Beale's bird.

" The first four notes are very exactly intonated, very clear, and very sweet. The three last are repeated in a kind of caw, a very high refinement of the voices of a daw or a crow, yet possessing a striking resemblance. And this suggests a lively affinity between the crows and the paradise birds. While this serenade is uttered, the black pupil, encircled by a golden iris, waxes or wanes, as the creature wishes to contemplate more distant or nearer objects. The bill snaps as the prelude of a meal and the token of appetite, while the body is conveyed from side to side by the highest and most easy springs. The crow and its congeners love to range upon the ground,
by side, and watched their specific differences with great care and attention. Mr. Thomas Sansom exhibited a proliferous specimen of Polytrichum commune, in which a second stem was developed in the place of the stalk bearing the fructification.

## ZOOLOGICAL SOCIETY.

Feb. 11, 1840.-The Rev. J. Barlow in the Chair.
Mr. G. T. Lay read the following account of the habits of a Bird of Paradise, Paradisea apoda, Linn.:-
"This bird has been in the possession of Mr. Beale upwards of fourteen years, and seemed when I left China at the commencement of the past year to be in full health and vigour. It is fed mainly upon boiled rice, with a few grasshoppers, as meat with its vegetables. These it eats whole when small, but pulls off the legs and wings when large. The tip of the abdomen, with the lower intestine, are rejected, while the rest of the viscera are devoured as a sort of choice morsel. It seizes the insect near its head with so firm a gripe, that life is soon extinct, which answers the double purpose of securing its prey and of shortening the dying throes of the poor victim. It is very careful to cleanse its bill after every such operation, wiping it upon the perch, and shaking it with a peculiar jerk. I have heard one remark that it is not a clean feeder, but this is true only of the mode of eating, which is gross and eager, as the largeness of the mouthful is incompatible with much grace or nicety in conveying the food to the place of its destination.
"The voice is loud and sonorous when he calls in a rapid succession of notes. This is probably the strain in which he answers his fellows in the wild state, and may be heard, from its clearness, a great distance, where walls and dwellings do not interfere with the pulsations. When you approach his cage he often treats you with a ditty, which I have called in my memorandum 'the song of solicitation.' It is short, but very pleasing, and not a little curious, for the notes are repeated in harmonic progression.
" The Serenade of Beale's bird.

" The first four notes are very exactly intonated, very clear, and very sweet. The three last are repeated in a kind of caw, a very high refinement of the voices of a daw or a crow, yet possessing a striking resemblance. And this suggests a lively affinity between the crows and the paradise birds. While this serenade is uttered, the black pupil, encircled by a golden iris, waxes or wanes, as the creature wishes to contemplate more distant or nearer objects. The bill snaps as the prelude of a meal and the token of appetite, while the body is conveyed from side to side by the highest and most easy springs. The crow and its congeners love to range upon the ground,
by side, and watched their specific differences with great care and attention. Mr. Thomas Sansom exhibited a proliferous specimen of Polytrichum commune, in which a second stem was developed in the place of the stalk bearing the fructification.

## ZOOLOGICAL SOCIETY.

Feb. 11, 1840.-The Rev. J. Barlow in the Chair.
Mr. G. T. Lay read the following account of the habits of a Bird of Paradise, Paradisea apoda, Linn.:-
"This bird has been in the possession of Mr. Beale upwards of fourteen years, and seemed when I left China at the commencement of the past year to be in full health and vigour. It is fed mainly upon boiled rice, with a few grasshoppers, as meat with its vegetables. These it eats whole when small, but pulls off the legs and wings when large. The tip of the abdomen, with the lower intestine, are rejected, while the rest of the viscera are devoured as a sort of choice morsel. It seizes the insect near its head with so firm a gripe, that life is soon extinct, which answers the double purpose of securing its prey and of shortening the dying throes of the poor victim. It is very careful to cleanse its bill after every such operation, wiping it upon the perch, and shaking it with a peculiar jerk. I have heard one remark that it is not a clean feeder, but this is true only of the mode of eating, which is gross and eager, as the largeness of the mouthful is incompatible with much grace or nicety in conveying the food to the place of its destination.
"The voice is loud and sonorous when he calls in a rapid succession of notes. This is probably the strain in which he answers his fellows in the wild state, and may be heard, from its clearness, a great distance, where walls and dwellings do not interfere with the pulsations. When you approach his cage he often treats you with a ditty, which I have called in my memorandum 'the song of solicitation.' It is short, but very pleasing, and not a little curious, for the notes are repeated in harmonic progression.
" The Serenade of Beale's bird.

" The first four notes are very exactly intonated, very clear, and very sweet. The three last are repeated in a kind of caw, a very high refinement of the voices of a daw or a crow, yet possessing a striking resemblance. And this suggests a lively affinity between the crows and the paradise birds. While this serenade is uttered, the black pupil, encircled by a golden iris, waxes or wanes, as the creature wishes to contemplate more distant or nearer objects. The bill snaps as the prelude of a meal and the token of appetite, while the body is conveyed from side to side by the highest and most easy springs. The crow and its congeners love to range upon the ground,
as having feet formed for walking, but the Paradise Bird shuns the bottom of the cage, as if afraid of soiling its delicate plumage ; for I must observe, that it is always as clean and wemless as it is gay and splendid. The Creator, who has poured so much beauty upon it, has also endowed it with an instinct to delight in these charms, and with wisdom to preserve them in their fullest integrity. In the wild state it is not unlikely that they catch their prey upon the wing, either by taking it in flight, like the swallow, or by darting upon it, like the Drongo Shrike, as it passes by the seat of its pursuer.
"The form and disposition of the pennons afford it the power of floating gracefully upon the breeze, not of cutting the air in rapid flight. The ease with which it glides upon the aure must be increased by the hypochondrial feathers, which are lifted up and displayed in the act of flying. The hypochondrial feathers are yellow at the base, whitening towards the end, with brown shafts. The shortness of the vanes makes them resemble the teeth of a saw near the end. The tail-coverts with long toothed shafts. The feet and legs are of a dark leaden blue. They are strong, and grasp the perch with great ease and firmness."

Mr. Fraser pointed out the characters of several new species of Humming-birds, which had been placed in his hands by the Earl of Derby for that purpose, and that they might be exhibited at one of the Society's scientific meetings. These birds were obtained at $\mathrm{S}^{\text {ta }}$ Fé de Bogota, and the collection contained eighteen species, a great portion of which being undescribed, were thus characterized :-

Trochilus exortis. T. rostro quàm caput paululìm longiore; caudd nigrescente, latissimd, subfurcatd; colore viridi; pectore caruleo enitente ; macula frontali splendidè viridi; lacinid gulari purpurascenti-rubra nitore caruleo ; menti plumis carruleis ; crisso albo.
Long. tot. 4 unc.; rostri, $\frac{3}{4}$; ala, $2 \frac{1}{2}$; cauda, $2 \frac{1}{8}$.
Hab. Guaduas, Columbia.
This species is of moderate size; the general colour of its plumage is deep rich green, with bronze reflections; the wings are dusky, with the upper and under coverts of the same green tint as the body: the two central tail-feathers are tinted with bronze, both above and beneath; the remaining tail-feathers, which are broad, are black, but in certain lights a very obscure purplish-green hue is observable; the feathers on the forehead are more compact than the remaining feathers of the head; in some lights they appear to be of a black colour, edged with green; in others they exhibit a most brilliant green lustre.

Trochilus cupreo-ventris. T. rostro quàm caput paululùm longiore ; caudd brevi, subfurcatâ : femoribus albis; colore splendidè viridi, aureo et cupreo enitente ; crisso purpurascenti-cceruleo ; primariis nigrescentibus ; caudd nigra, purpureo tincta.
Long. tot. $4 \frac{3}{4}$ unc. ; rostri, 1 ; ala, $2 \frac{3}{8}$; cauda, $1 \frac{7}{8}$.
This species is remarkable for the richness of its colouring; in
as having feet formed for walking, but the Paradise Bird shuns the bottom of the cage, as if afraid of soiling its delicate plumage ; for I must observe, that it is always as clean and wemless as it is gay and splendid. The Creator, who has poured so much beauty upon it, has also endowed it with an instinct to delight in these charms, and with wisdom to preserve them in their fullest integrity. In the wild state it is not unlikely that they catch their prey upon the wing, either by taking it in flight, like the swallow, or by darting upon it, like the Drongo Shrike, as it passes by the seat of its pursuer.
"The form and disposition of the pennons afford it the power of floating gracefully upon the breeze, not of cutting the air in rapid flight. The ease with which it glides upon the aure must be increased by the hypochondrial feathers, which are lifted up and displayed in the act of flying. The hypochondrial feathers are yellow at the base, whitening towards the end, with brown shafts. The shortness of the vanes makes them resemble the teeth of a saw near the end. The tail-coverts with long toothed shafts. The feet and legs are of a dark leaden blue. They are strong, and grasp the perch with great ease and firmness."

Mr. Fraser pointed out the characters of several new species of Humming-birds, which had been placed in his hands by the Earl of Derby for that purpose, and that they might be exhibited at one of the Society's scientific meetings. These birds were obtained at $\mathrm{S}^{\text {ta }}$ Fé de Bogota, and the collection contained eighteen species, a great portion of which being undescribed, were thus characterized :-

Trochilus exortis. T. rostro quàm caput paululìm longiore; caudd nigrescente, latissimd, subfurcatd; colore viridi; pectore caruleo enitente ; macula frontali splendidè viridi; lacinid gulari purpurascenti-rubra nitore caruleo ; menti plumis carruleis ; crisso albo.
Long. tot. 4 unc.; rostri, $\frac{3}{4}$; ala, $2 \frac{1}{2}$; cauda, $2 \frac{1}{8}$.
Hab. Guaduas, Columbia.
This species is of moderate size; the general colour of its plumage is deep rich green, with bronze reflections; the wings are dusky, with the upper and under coverts of the same green tint as the body: the two central tail-feathers are tinted with bronze, both above and beneath; the remaining tail-feathers, which are broad, are black, but in certain lights a very obscure purplish-green hue is observable; the feathers on the forehead are more compact than the remaining feathers of the head; in some lights they appear to be of a black colour, edged with green; in others they exhibit a most brilliant green lustre.

Trochilus cupreo-ventris. T. rostro quàm caput paululùm longiore ; caudd brevi, subfurcatâ : femoribus albis; colore splendidè viridi, aureo et cupreo enitente ; crisso purpurascenti-cceruleo ; primariis nigrescentibus ; caudd nigra, purpureo tincta.
Long. tot. $4 \frac{3}{4}$ unc. ; rostri, 1 ; ala, $2 \frac{3}{8}$; cauda, $1 \frac{7}{8}$.
This species is remarkable for the richness of its colouring; in
as having feet formed for walking, but the Paradise Bird shuns the bottom of the cage, as if afraid of soiling its delicate plumage ; for I must observe, that it is always as clean and wemless as it is gay and splendid. The Creator, who has poured so much beauty upon it, has also endowed it with an instinct to delight in these charms, and with wisdom to preserve them in their fullest integrity. In the wild state it is not unlikely that they catch their prey upon the wing, either by taking it in flight, like the swallow, or by darting upon it, like the Drongo Shrike, as it passes by the seat of its pursuer.
"The form and disposition of the pennons afford it the power of floating gracefully upon the breeze, not of cutting the air in rapid flight. The ease with which it glides upon the aure must be increased by the hypochondrial feathers, which are lifted up and displayed in the act of flying. The hypochondrial feathers are yellow at the base, whitening towards the end, with brown shafts. The shortness of the vanes makes them resemble the teeth of a saw near the end. The tail-coverts with long toothed shafts. The feet and legs are of a dark leaden blue. They are strong, and grasp the perch with great ease and firmness."

Mr. Fraser pointed out the characters of several new species of Humming-birds, which had been placed in his hands by the Earl of Derby for that purpose, and that they might be exhibited at one of the Society's scientific meetings. These birds were obtained at $\mathrm{S}^{\text {ta }}$ Fé de Bogota, and the collection contained eighteen species, a great portion of which being undescribed, were thus characterized :-

Trochilus exortis. T. rostro quàm caput paululìm longiore; caudd nigrescente, latissimd, subfurcatd; colore viridi; pectore caruleo enitente ; macula frontali splendidè viridi; lacinid gulari purpurascenti-rubra nitore caruleo ; menti plumis carruleis ; crisso albo.
Long. tot. 4 unc.; rostri, $\frac{3}{4}$; ala, $2 \frac{1}{2}$; cauda, $2 \frac{1}{8}$.
Hab. Guaduas, Columbia.
This species is of moderate size; the general colour of its plumage is deep rich green, with bronze reflections; the wings are dusky, with the upper and under coverts of the same green tint as the body: the two central tail-feathers are tinted with bronze, both above and beneath; the remaining tail-feathers, which are broad, are black, but in certain lights a very obscure purplish-green hue is observable; the feathers on the forehead are more compact than the remaining feathers of the head; in some lights they appear to be of a black colour, edged with green; in others they exhibit a most brilliant green lustre.

Trochilus cupreo-ventris. T. rostro quàm caput paululùm longiore ; caudd brevi, subfurcatâ : femoribus albis; colore splendidè viridi, aureo et cupreo enitente ; crisso purpurascenti-cceruleo ; primariis nigrescentibus ; caudd nigra, purpureo tincta.
Long. tot. $4 \frac{3}{4}$ unc. ; rostri, 1 ; ala, $2 \frac{3}{8}$; cauda, $1 \frac{7}{8}$.
This species is remarkable for the richness of its colouring; in
certain lights it appears as if it were powdered with gold and coppercoloured particles ; the coppery hue prevails most on the belly ; and the upper tail-coverts are of a purer green than other parts.

Another blue-vented and white-thighed Humming-bird was described under the name of

Trochilus uropygialis. T. rostro quàm caput longiore ; cauda mediocri, furcatá: colore corporis intensè viridi, aureo relucente; rectricibus cauda fulgidè aureo-viridibus; gula crissoque ex purpureo splendidè cceruleis ; abdomine nitidè viridi ; alis nigrescentibus ; caudd ex purpureo atrd; plumis femoralibus albis, laxis.
In the female the throat and chest are somewhat rusty, with green spots, and the feathers on the belly are variegated with whitish.

This species is about the same size, and in many respects resembles the T. cupreo-ventris, but differs in having the general colour less brilliant, whilst the feathers of the belly and the upper tailcoverts are more brilliant, and present that compact striated appearance which is always observable in those feathers which give that extreme brilliancy to different parts of these birds : it differs, moreover, in having a blue throat, and the belly, instead of being cupreous, is bluish-green. The upper tail-coverts in T. cupreo-ventris are of the same loose character as those on the back.

Trochilus coruscus. T. rostro brevi; caudd latissima, subfurcatd, ex eneo fuscd: corpore suprà, capiteque viridibus nitore aureo; teċtricibus cauda cupreis; primariis purpurascentibus; corpore subtìs viridescente, fuscescenti-ochreo, prasertim ad crissum, tincto ; lined gulari, ad pectus tendente nitidè viridi, apice purpu-rascenti-rubro.
Long. tot. $5 \frac{1}{4}$ unc. ; rostri, $\frac{3}{4}$; ala, $2 \frac{7}{8}$; cauda, $2 \frac{1}{8}$.
Beak about equal to the head in length; tail slightly forked, the feathers very broad; general colour of upper parts green, with golden reflections, upper tail-coverts coppery; under parts dull brownish-green; tail-feathers above and beneath rich bronze, with golden brown reflections; primaries dusky, with purple reflections : a stripe, extending from the chin to the chest, is composed of compact brilliant feathers; those on the chin and throat are green, and those beyond are purplish-red, exhibiting bluish reflections; under tail-coverts brownish-yellow ; some of the feathers are whitish; the feathers on the edge of the shoulders are varied with brownishochre.

The female is deficient of the flame-like mark on the throat.
Trochilus brachyrhynchus. T. rostro quàm caput breviore; caudd brevi, nigro, cupreo et aneo subnitente; rectricibus utrinque duabus externis cateris paululùm prestantibus, et ad apicem albis: corpore suprà, ex aureo viridi, corpore subtùs albo (interdùm favido lavato), maculis ex aureo viridibus ornato ; primariis purpurascentibus.
Long. tot. $3 \frac{5}{12}$ unc. ; rostri, $\frac{1}{3}$; ala, $1 \frac{7}{8}$; cauda, $1 \frac{7}{12}$.
In one specimen there is a rufous tint on the upper tail-coverts;
certain lights it appears as if it were powdered with gold and coppercoloured particles ; the coppery hue prevails most on the belly ; and the upper tail-coverts are of a purer green than other parts.

Another blue-vented and white-thighed Humming-bird was described under the name of

Trochilus uropygialis. T. rostro quàm caput longiore ; cauda mediocri, furcatá: colore corporis intensè viridi, aureo relucente; rectricibus cauda fulgidè aureo-viridibus; gula crissoque ex purpureo splendidè cceruleis ; abdomine nitidè viridi ; alis nigrescentibus ; caudd ex purpureo atrd; plumis femoralibus albis, laxis.
In the female the throat and chest are somewhat rusty, with green spots, and the feathers on the belly are variegated with whitish.

This species is about the same size, and in many respects resembles the T. cupreo-ventris, but differs in having the general colour less brilliant, whilst the feathers of the belly and the upper tailcoverts are more brilliant, and present that compact striated appearance which is always observable in those feathers which give that extreme brilliancy to different parts of these birds : it differs, moreover, in having a blue throat, and the belly, instead of being cupreous, is bluish-green. The upper tail-coverts in T. cupreo-ventris are of the same loose character as those on the back.

Trochilus coruscus. T. rostro brevi; caudd latissima, subfurcatd, ex eneo fuscd: corpore suprà, capiteque viridibus nitore aureo; teċtricibus cauda cupreis; primariis purpurascentibus; corpore subtìs viridescente, fuscescenti-ochreo, prasertim ad crissum, tincto ; lined gulari, ad pectus tendente nitidè viridi, apice purpu-rascenti-rubro.
Long. tot. $5 \frac{1}{4}$ unc. ; rostri, $\frac{3}{4}$; ala, $2 \frac{7}{8}$; cauda, $2 \frac{1}{8}$.
Beak about equal to the head in length; tail slightly forked, the feathers very broad; general colour of upper parts green, with golden reflections, upper tail-coverts coppery; under parts dull brownish-green; tail-feathers above and beneath rich bronze, with golden brown reflections; primaries dusky, with purple reflections : a stripe, extending from the chin to the chest, is composed of compact brilliant feathers; those on the chin and throat are green, and those beyond are purplish-red, exhibiting bluish reflections; under tail-coverts brownish-yellow ; some of the feathers are whitish; the feathers on the edge of the shoulders are varied with brownishochre.

The female is deficient of the flame-like mark on the throat.
Trochilus brachyrhynchus. T. rostro quàm caput breviore; caudd brevi, nigro, cupreo et aneo subnitente; rectricibus utrinque duabus externis cateris paululùm prestantibus, et ad apicem albis: corpore suprà, ex aureo viridi, corpore subtùs albo (interdùm favido lavato), maculis ex aureo viridibus ornato ; primariis purpurascentibus.
Long. tot. $3 \frac{5}{12}$ unc. ; rostri, $\frac{1}{3}$; ala, $1 \frac{7}{8}$; cauda, $1 \frac{7}{12}$.
In one specimen there is a rufous tint on the upper tail-coverts;
certain lights it appears as if it were powdered with gold and coppercoloured particles ; the coppery hue prevails most on the belly ; and the upper tail-coverts are of a purer green than other parts.

Another blue-vented and white-thighed Humming-bird was described under the name of

Trochilus uropygialis. T. rostro quàm caput longiore ; cauda mediocri, furcatá: colore corporis intensè viridi, aureo relucente; rectricibus cauda fulgidè aureo-viridibus; gula crissoque ex purpureo splendidè cceruleis ; abdomine nitidè viridi ; alis nigrescentibus ; caudd ex purpureo atrd; plumis femoralibus albis, laxis.
In the female the throat and chest are somewhat rusty, with green spots, and the feathers on the belly are variegated with whitish.

This species is about the same size, and in many respects resembles the T. cupreo-ventris, but differs in having the general colour less brilliant, whilst the feathers of the belly and the upper tailcoverts are more brilliant, and present that compact striated appearance which is always observable in those feathers which give that extreme brilliancy to different parts of these birds : it differs, moreover, in having a blue throat, and the belly, instead of being cupreous, is bluish-green. The upper tail-coverts in T. cupreo-ventris are of the same loose character as those on the back.

Trochilus coruscus. T. rostro brevi; caudd latissima, subfurcatd, ex eneo fuscd: corpore suprà, capiteque viridibus nitore aureo; teċtricibus cauda cupreis; primariis purpurascentibus; corpore subtìs viridescente, fuscescenti-ochreo, prasertim ad crissum, tincto ; lined gulari, ad pectus tendente nitidè viridi, apice purpu-rascenti-rubro.
Long. tot. $5 \frac{1}{4}$ unc. ; rostri, $\frac{3}{4}$; ala, $2 \frac{7}{8}$; cauda, $2 \frac{1}{8}$.
Beak about equal to the head in length; tail slightly forked, the feathers very broad; general colour of upper parts green, with golden reflections, upper tail-coverts coppery; under parts dull brownish-green; tail-feathers above and beneath rich bronze, with golden brown reflections; primaries dusky, with purple reflections : a stripe, extending from the chin to the chest, is composed of compact brilliant feathers; those on the chin and throat are green, and those beyond are purplish-red, exhibiting bluish reflections; under tail-coverts brownish-yellow ; some of the feathers are whitish; the feathers on the edge of the shoulders are varied with brownishochre.

The female is deficient of the flame-like mark on the throat.
Trochilus brachyrhynchus. T. rostro quàm caput breviore; caudd brevi, nigro, cupreo et aneo subnitente; rectricibus utrinque duabus externis cateris paululùm prestantibus, et ad apicem albis: corpore suprà, ex aureo viridi, corpore subtùs albo (interdùm favido lavato), maculis ex aureo viridibus ornato ; primariis purpurascentibus.
Long. tot. $3 \frac{5}{12}$ unc. ; rostri, $\frac{1}{3}$; ala, $1 \frac{7}{8}$; cauda, $1 \frac{7}{12}$.
In one specimen there is a rufous tint on the upper tail-coverts;
in another there are several purple feathers irregularly scattered with the ordinary golden green ones on the back; perhaps in the adult bird this purple is the prevailing colour of the back.
This small-sized species is remarkable for the shortness of its beak, which is acutely pointed, and a little dilated in the middle.

Trochilus Derbianus. T. rostro recurvo, quoad longitudinem, corpus cum capite equiparante; caudd mediocri, paululim furcatd: colore viridi, corpore subtùs albido variegato; guld nigrescente.
${ }^{\top}$ Long. tot. 8 unc. ; rostri, $3 \frac{3}{8}$; ala, 3 ; cauda, $2 \frac{1}{4}$.
ㅇ —— $7 \frac{1}{4} \longrightarrow \longrightarrow, 2 \frac{3}{4} ;-3 ;$ ——, 2.
Bill immensely long, and somewhat recurved, equal in length to the head and body ; tail moderate, slightly forked ; head and upper parts of body green, with golden and bronze reflections; wings pur-plish-black; tail blackish, tinted with bronze, the central feathers being the richest; chin and throat dusky, each feather very obscurely tinted with bronze in the middle, and edged with ashy-white; belly and vent green; the feathers edged with white, or in parts greyish, those on the chest are whitish, with a large green spot near the apex ; under wing-coverts green.

The female has a shorter beak; and there is more white on the under parts of the body; the feathers on the throat and chin are somewhat variegated with yellowish.

Trochilus aurogaster, Loddiges' MSS. T. rostro ferè duplo quàm caput longiore ; cauda mediocriter lata et furcatd ; plumis corporis permagnis, et suprà et subtùs: colore splendidè viridi; tectricibus caude plumisque abdominis, nitidè aureo relucentibus; notd gulari purpureo-caruled, necnon apud frontem nota, luce favente, gramineo-viridi; crissi plumis aureo-viridibus, ferrugineo marginatis ; alarum primariis fuscescenti-nigris non sine aneo nitore ; caudd ex-aureo-eneo-viridi.
In the female the throat is of a rusty yellow tint, and is sparingly spotted with green; the belly and vent are of an ochreous colour, with heart-shaped green spots; on the former the green predominates, and on the under tail-coverts the yellowish tint prevails.

This species is of moderate size; that portion of the under mandible which shuts into the upper one is white.

Trochilus fuscicaudatus. T. rostro quàm caput longiore; caudd subrotundatd: colore ex aureo viridi; plumis gula, pectoris, et abdominis, albido marginatis ; plumis analibus albis; crisso fusco, rectricibus cauda submetallicè castaneis, nigrescente marginatis; remigibus alarum nigrescentibus, purpureo paululùm relucentibus; mandibuld inferiore (apice excepto), necnon superioris basi, pallidè fuscis.
Long. tot. 4 unc. ; rostri, $\frac{7}{8}$; ala, 2 ; caude, $1 \frac{1}{2}$.
Hab. Chachapayas, Peru.
Trochilus cyanopterus, Loddiges' MSS. Tr. rostro quàm caput multo longiore ; caudd latissimả et leviter furcatd : colore intensè viridi, ad nigrum hic atque illic vergente, prasertim apud caput;
in another there are several purple feathers irregularly scattered with the ordinary golden green ones on the back; perhaps in the adult bird this purple is the prevailing colour of the back.
This small-sized species is remarkable for the shortness of its beak, which is acutely pointed, and a little dilated in the middle.

Trochilus Derbianus. T. rostro recurvo, quoad longitudinem, corpus cum capite equiparante; caudd mediocri, paululim furcatd: colore viridi, corpore subtùs albido variegato; guld nigrescente.
${ }^{\top}$ Long. tot. 8 unc. ; rostri, $3 \frac{3}{8}$; ala, 3 ; cauda, $2 \frac{1}{4}$.
ㅇ —— $7 \frac{1}{4} \longrightarrow \longrightarrow, 2 \frac{3}{4} ;-3 ;$ ——, 2.
Bill immensely long, and somewhat recurved, equal in length to the head and body ; tail moderate, slightly forked ; head and upper parts of body green, with golden and bronze reflections; wings pur-plish-black; tail blackish, tinted with bronze, the central feathers being the richest; chin and throat dusky, each feather very obscurely tinted with bronze in the middle, and edged with ashy-white; belly and vent green; the feathers edged with white, or in parts greyish, those on the chest are whitish, with a large green spot near the apex ; under wing-coverts green.

The female has a shorter beak; and there is more white on the under parts of the body; the feathers on the throat and chin are somewhat variegated with yellowish.

Trochilus aurogaster, Loddiges' MSS. T. rostro ferè duplo quàm caput longiore ; cauda mediocriter lata et furcatd ; plumis corporis permagnis, et suprà et subtùs: colore splendidè viridi; tectricibus caude plumisque abdominis, nitidè aureo relucentibus; notd gulari purpureo-caruled, necnon apud frontem nota, luce favente, gramineo-viridi; crissi plumis aureo-viridibus, ferrugineo marginatis ; alarum primariis fuscescenti-nigris non sine aneo nitore ; caudd ex-aureo-eneo-viridi.
In the female the throat is of a rusty yellow tint, and is sparingly spotted with green; the belly and vent are of an ochreous colour, with heart-shaped green spots; on the former the green predominates, and on the under tail-coverts the yellowish tint prevails.

This species is of moderate size; that portion of the under mandible which shuts into the upper one is white.

Trochilus fuscicaudatus. T. rostro quàm caput longiore; caudd subrotundatd: colore ex aureo viridi; plumis gula, pectoris, et abdominis, albido marginatis ; plumis analibus albis; crisso fusco, rectricibus cauda submetallicè castaneis, nigrescente marginatis; remigibus alarum nigrescentibus, purpureo paululùm relucentibus; mandibuld inferiore (apice excepto), necnon superioris basi, pallidè fuscis.
Long. tot. 4 unc. ; rostri, $\frac{7}{8}$; ala, 2 ; caude, $1 \frac{1}{2}$.
Hab. Chachapayas, Peru.
Trochilus cyanopterus, Loddiges' MSS. Tr. rostro quàm caput multo longiore ; caudd latissimả et leviter furcatd : colore intensè viridi, ad nigrum hic atque illic vergente, prasertim apud caput;
in another there are several purple feathers irregularly scattered with the ordinary golden green ones on the back; perhaps in the adult bird this purple is the prevailing colour of the back.
This small-sized species is remarkable for the shortness of its beak, which is acutely pointed, and a little dilated in the middle.

Trochilus Derbianus. T. rostro recurvo, quoad longitudinem, corpus cum capite equiparante; caudd mediocri, paululim furcatd: colore viridi, corpore subtùs albido variegato; guld nigrescente.
${ }^{\top}$ Long. tot. 8 unc. ; rostri, $3 \frac{3}{8}$; ala, 3 ; cauda, $2 \frac{1}{4}$.
ㅇ —— $7 \frac{1}{4} \longrightarrow \longrightarrow, 2 \frac{3}{4} ;-3 ;$ ——, 2.
Bill immensely long, and somewhat recurved, equal in length to the head and body ; tail moderate, slightly forked ; head and upper parts of body green, with golden and bronze reflections; wings pur-plish-black; tail blackish, tinted with bronze, the central feathers being the richest; chin and throat dusky, each feather very obscurely tinted with bronze in the middle, and edged with ashy-white; belly and vent green; the feathers edged with white, or in parts greyish, those on the chest are whitish, with a large green spot near the apex ; under wing-coverts green.

The female has a shorter beak; and there is more white on the under parts of the body; the feathers on the throat and chin are somewhat variegated with yellowish.

Trochilus aurogaster, Loddiges' MSS. T. rostro ferè duplo quàm caput longiore ; cauda mediocriter lata et furcatd ; plumis corporis permagnis, et suprà et subtùs: colore splendidè viridi; tectricibus caude plumisque abdominis, nitidè aureo relucentibus; notd gulari purpureo-caruled, necnon apud frontem nota, luce favente, gramineo-viridi; crissi plumis aureo-viridibus, ferrugineo marginatis ; alarum primariis fuscescenti-nigris non sine aneo nitore ; caudd ex-aureo-eneo-viridi.
In the female the throat is of a rusty yellow tint, and is sparingly spotted with green; the belly and vent are of an ochreous colour, with heart-shaped green spots; on the former the green predominates, and on the under tail-coverts the yellowish tint prevails.

This species is of moderate size; that portion of the under mandible which shuts into the upper one is white.

Trochilus fuscicaudatus. T. rostro quàm caput longiore; caudd subrotundatd: colore ex aureo viridi; plumis gula, pectoris, et abdominis, albido marginatis ; plumis analibus albis; crisso fusco, rectricibus cauda submetallicè castaneis, nigrescente marginatis; remigibus alarum nigrescentibus, purpureo paululùm relucentibus; mandibuld inferiore (apice excepto), necnon superioris basi, pallidè fuscis.
Long. tot. 4 unc. ; rostri, $\frac{7}{8}$; ala, 2 ; caude, $1 \frac{1}{2}$.
Hab. Chachapayas, Peru.
Trochilus cyanopterus, Loddiges' MSS. Tr. rostro quàm caput multo longiore ; caudd latissimả et leviter furcatd : colore intensè viridi, ad nigrum hic atque illic vergente, prasertim apud caput;

